

REMARKS

This Amendment is responsive to the Office Action dated February 28, 2003.

Claims 1-18 were pending in the application. In the Office Action, claims 1-18 were rejected. Applicants submit that claims 1-18 are in condition for allowance and request reconsideration and withdrawal of the rejections in light of the following remarks.

§102 and §103 Rejections

Claims 1-14 and 18 were rejected under 35 U.S.C. §102(b) as being anticipated by Wellard et al. (USPN 5,862,477).

Claims 13-17 were rejected under 35 U.S.C. §102(b) as being anticipated by Feng (USPN 5,374,936).

Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wellard in view of Pelech et al. (USPN 6,243,585).

Claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wellard in view of Jennings, III (USPN 6,173,191).

Applicants submit that claim 1 is patentable over Wellard.

Applicants' invention as recited in claim 1, is directed toward a method of creating a topology map in a wireless network. The map indicates the quality of connectivity of each network device with all other network devices. More specifically, claim 1 recites:

Method to create a topology map indicating the quality of connectivity of each network device of a wireless network with all other network devices in said wireless network, characterized by the following steps:

- performing a measurement phase in which a calibration signal is successively broadcasted by each network device and in which all

respective other network devices receiving said calibration signal measure the received signal quality;

- performing a reporting phase in which the measurement results are transmitted from each network device to the network device creating said topology map; and

- performing a creating phase in which said topology map of the network is created within the network device creating said topology map on basis of all received measurement results.

As opposed to the present invention which addresses the problem of improving the quality of connectivity between network devices communicating in a wireless network, e.g., in direct mode, Wellard relates to the detecting of a change in the system topology so as to potentially identify tampering with a system whose placement is restricted by law to protect incumbent users of the frequency band at which the system operates. This vivid distinction in the respective contexts must be kept in mind when assessing the novelty of the present invention, i.e., when interpreting the nomenclature of the claims for the purpose of comparing these with the prior art. Moreover, only hindsight could justify the selection of Wellard as the closest prior art for the assessment of the patentability of the present invention.

Applicants note numerous distinction between the disclosure of Wellard and claim 1. For one, Wellard does not teach the creation of a topology map with regard to devices of a wireless network. Instead, as is clearly visible from Wellard's Fig. 1, a signature is generated that is indicative of the signal strength between cordless fixed parts, i.e., base stations, that communicate via a wired infrastructure (cf. column 4, lines 32-34). Consequently, the "signature" of Wellard is not indicative of the quality of connectivity between respective devices of a wireless network in the sense of the present invention.

In addition to the above, Wellard fails to teach the distinct measurement and reporting phases of claim 1, the wireless transmission of measurement results to a wireless network device, nor the creation of a topology map within said network device, the CCU of Wellard being a wired device.

Moreover, Wellard, for reasons of simplicity, teaches against the creation of a topology map on the basis of all received measurement signals (cf. col. 5, lines 50-54).

Applicants submit that claim 13 is patentable over Wellard and/or Feng.

Applicants' invention as recited in claim 13, is directed toward a device for a wireless network. More specifically, claim 13 recites:

Network device for a wireless network, characterized by means to broadcast a calibration signal, to measure a power level of a received calibration signal, and to transmit its measurement results to another network device or to store it internally

Regarding the rejection of claim 13 based on Wellard, Applicants note that Wellard fails to teach the transmission of measurement results, "transmission" being wireless communication in both the nomenclature of the present invention and Wellard. Moreover, Wellard does not teach means for storing the measurement results internally.

Regarding the rejection of claim 13 based on Feng, Applicants generally note that, like Wellard, Feng does not address the problem of improving the quality of connectivity between network devices communicating in a wireless network, e.g., in direct mode, but instead relates to a security system comprising means for accurately determining the position of a portable signal transmitter in two or three dimensions. Specifically, Feng employs accurate timing mechanisms, signal intensity meters, a central station and

several relay stations to measure the propagation delay and/or the signal decay at several locations so as to determine the position of the portable signal transmitter.

Further, Feng does not teach a network device that comprises both means to broadcast a calibration signal and means to measure a power level of a received calibration signal. In accordance with the third embodiment of Feng, i.e., the only embodiment employing intensity meters, a calibration signal is sent out by the central station whereas the calibration signal is received and its intensity is measured by the relay stations. Moreover, Feng does not teach means for storing the measurement results internally.

Applicants submit that claim 18 is patentable over Wellard.

Applicants' invention as recited in claim 18 is directed toward a device for a wireless network. More specifically, the claim recites:

Network device for a wireless network, characterized by means to initiate a measurement phase, to initiate a reporting phase and to perform a creation of a topology map on basis of measurement results received during the reporting phase.

As noted above with regard to claim 1, Wellard fails to teach the measurement and reporting phases of claim 18 or to suggest any advantages that may arise from such phases as does the present application (cf. p. 3, final paragraph as well as the paragraph bridging pages 6 and 7 of the present application). In addition, Wellard does not teach a network device for a wireless network having means to perform a creation of a topology map, the CCU of Wellard being a strictly wired device.

Regarding the Pelech and Jennings, III references, Applicants note that these references were cited by the Examiner merely in relation to limitations included in Applicants' dependent claims. Neither Pelech nor Jennings, III can cure the deficiencies of Wellard and Feng with respect to claims 1, 13 and 18.

Accordingly, Applicants submit that claims 1, 13 and 18 are patentable over Wellard, Feng, Pelech and Jennings, III, taken either alone or in combination.

Claims 2-12 depend on claim 1. Since claim 1 is believed to be patentable over the cited references, claims 2-12 are believed to be patentable over the cited references on the basis of their dependency on claim 1.

Claims 14-17 depend on claim 13. Since claim 13 is believed to be patentable over the cited references, claims 14-17 are believed to be patentable over the cited references on the basis of their dependency on claim 13.

Applicants respectfully submit that all of the claims now pending in the application are in condition for allowance, which action is earnestly solicited.

Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicants' undersigned attorney, and, in the event that the Examiner disagrees with any such opinion, it is respectfully requested that the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance

with the requirements of 35 U.S.C. 112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. sections 101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

If any issues remain, or if the Examiner has any further suggestions, he/she is invited to call the undersigned at the telephone number provided below.

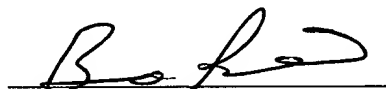
The Examiner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account No.50-0320.

The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,

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